

REMARKS

Reconsideration of this application is requested.

Claims 1, 9 and 16 have been amended to overcome the indefinite terms noted by the examiner. The word "member", Claim 1, line 9, has been changed to --means--. The word "thread", Claim 1, line 10, has been changed to --threaded--. The terms "improvement of" have been changed to --improvement comprising--. These amendments are not new matter. Applicant requests that the rejection under 35 USC 112 be withdrawn.

Reconsideration of the grease gun disclosed by *Krannak* and the rejection of Claims 1, 2, 9, 10 and 11 on *Krannak* is requested. The *Krannak* grease gun has a pumping chamber 31 and a piston 33 that moves into and out of chamber 31 to pump grease past check valve 34 into a final grease discharge passage. A grease supply passage 15 transfers grease from grease cartridge 6 to pumping chamber 31. Grease will not flow into pumping chamber 31 when air is trapped in the pumping chamber 31. There is no air bleed valve open to pumping chamber 31 to vent air from the pumping chamber 31. Check valve 36 is between passages 33 and 35. A clamping screw 37 normally closes valve 36. *See Col. 3, lines 58-60*. Valve 36 functions to relieve the discharge pipe from pressure after the injection of grease so as to relieve coupling nozzles to receiving nipples. *Col. 6, lines 4-10*. Valve 36 does not bleed air from the pumping chamber 31. Clamping screw 37 does not have an air passage, such as at least one side groove, to allow air to flow through screw 37. The rod 24 and its collar 246 does not function to bleed air from pumping chamber 31 and passage 15. There is a body of grease between passage 15 and piston head 18 that prevents air from flowing from passage 15 to collar 246 and rod 24.

Claim 1 defines the improvement of a grease gun as a threaded hole in the body aligned with the grease supply passage and open to the pumping chamber. A threaded stem is located in the threaded hole. The stem has at least one linear side groove open to the pumping chamber to

allow air to bleed from the pumping chamber when the stem is rotated in one direction. *Krannak* does not disclose nor suggest the claimed stem with at least one side groove to bleed air from the pumping chamber and grease supply passage. The problem of trapped air in the pumping chamber is not solved by *Krannak*. The allowance of Claim 1 is requested.

Claims 2 to 6 depend upon Claim 1. These claims more particularly define the grease gun of Claim 1. Claim 2 includes a plurality of side grooves in the stem to allow air to flow through the valve. Claims 3 to 5 define the annular seal assembly surrounding the stem and engagable with the body when the stem is in its closed position. Claim 6 defines the ear on the head to facilitate turning of the stem. Allowance of Claims 2 to 6 along with Claim 1 is requested.

It is noted that the valve 70 shown in Figure 2 of *Barish* is not an air bleed valve. O-ring 71a is not associated with an air bleed valve.

Claim 7 has been amended into an independent claim. The word "member" defined in line 9 has been changed to --means-- mounted on the base for supplying grease to the grease supply passage. The terms "improvement of" have been changed to --improvement comprising--. The word "form" has been changed to --from--. These amendments overcome the informal matters noted by the examiner. The allowance of Claim 7 is requested.

Claim 8 depends on Claim 7. Applicant requests that Claim 8 be allowed along with Claim 7. Claim 8 defines the stem as having a plurality of side grooves.

Claim 9 defines the improvement of a grease gun as comprising a threaded hole in the body open to the pumping chamber. A threaded stem is located in the hole. The stem has at least one side groove having one end open to the pumping chamber and closed at the opposite end. The threaded stem is rotated in one direction to open the valve to allow air to bleed from the pumping chamber. The valve is closed by rotating the stem in an opposite direction to the

one direction to prevent escape of grease from the pumping chamber. *Krannak* does not disclose nor suggest the claimed threaded stem with at least one side groove for bleeding air from the pumping chamber 31. The allowance of Claim 9 is requested.

Claims 10 to 15 depend on Claim 9. These claims more particularly define the grease gun of Claim 9. These claims more particularly define the grease gun of Claim 9. Claim 10 includes a plurality of side grooves in the stem to allow air to flow through the valve. Claims 11 to 13 define the annular seal assembly surrounding the stem and engageable with the body. Claims 14 and 15 define the side groove in the stem. Claim 14, line 2, has been amended to change "form" to --from--. The allowance of Claims 10 to 15 with Claim 9 is requested.

Claim 16 has been amended to change "improvement of" to --improvement comprising--. The improvement is an air bleed valve mounted on the body in communication with the pumping chamber and in alignment with the grease supply passage to allow air to bleed from the pumping chamber and grease supply passage. Air trapped in the pumping chamber prevents grease from filling the pumping chamber. Movement of the piston in the pumping chamber having air will not pump grease out of the pumping chamber. The valve has an open position to allow air to bleed from the pumping chamber and grease supply passage. This allows grease to fill the pumping chamber. The valve also has a closed position to prevent grease from flowing through the valve into the atmosphere and air from flowing back into the pumping chamber. As pointed out herein *Krannak* does not disclose or suggest an air bleed valve that is open to the pumping chamber and aligned with the grease supply passage to bleed air from the pumping chamber and grease supply passage as defined in Claim 16. Applicant requests the allowance of Claim 16.

Claim 17 has been amended to include the grease gun structure defined in parent Claim 16. The term "improvement of" has been changed to --improvement comprising--. This

amendment overcomes the informal rejection of Claim 16. Claim 17 has been further amended to include the function of the one passage of the threaded member of the valve. The one passage is open to atmosphere to allow air to bleed from the pumping chamber and grease supply passage. The one passage is closed to prevent grease from flowing through the one passage into the atmosphere and air from flowing back into the pumping chamber. The allowance of Claim 17 is requested.

Claims 18 to 23 depend on Claim 17. These claims more particularly define the improvements in the grease gun of parent Claim 16. Claim 18 defines the passage in the threaded member as at least one side groove open to the pumping chamber. Claim 23 defines the passage as a plurality of side grooves in the threaded member. The prior art does not disclose or suggest side grooves in a threaded valve member.

Claims 19 to 21 further include the annular seal surrounding the threaded member of the valve which engages the body when the valve is in the closed position.

Claim 22 has been amended to define the one passage as comprising at least one side groove extended from the inner end of the threaded member about halfway to the outer end thereof. This amendment provides a basis for the side grooves defined in Claim 23.

The allowance of Claims 18 to 23 with Claim 17 is requested.

In view of the above remarks, Applicant requests the allowance of Claims 1 to 23.

Clean copies of amended Claims 1, 7, 9, 14, 16, 17 and 22 are enclosed.

Respectfully submitted,

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